

**Project: Wupatki Trails EWP**  
Conceptual Alignments

9/19/2012

	<b>Subdivision Interior</b>	<b>Highway</b>
Alignment Description	The project channel enters the neighborhood from the Forest Service land at Lot 18 and follows the road alignment through the subdivision ultimately draining to the ADOT box culvert at US 89	The project channel enters the neighborhood from the Forest Service land at Lot 25 and closely parallels US 89 ultimately draining to the ADOT box culvert at US 89
<b>Timeline</b>		
Construction Timeline	Longer; 90 to 120 days	Shorter; 30 to 60 days
<b>Clearances, Authorizations</b>		
Permitting	County ROW, USFS Environmental, ADOT Encroachment, ADEQ Water Line	County ROW, USFS Environmental, ADOT Encroachment
Drainage Easements Needed	13, need additional approximate 15 feet plus 15 feet of existing ROW	12, need approximate 30 feet
<b>Technical</b>		
Right of Way Constraints	Yes; approximately 15 feet available, additional easements will be needed	Yes; approximately 200 feet of channel in ADOT ROW, most of channel to be constructed in easements
Driveway Crossings	Yes; 9 existing driveway crossings will be needed and will not fit within the existing right of way, future crossings will be needed as lots are developed	No
Roadway Crossings	Yes; 1 at Lenox	Yes; 2, Lenox and Vientos
Channel Side Slopes	4 to 1 max next to road shoulder, 1 to 1 on lot side to minimize channel width	3 to 1
Channel Depth	2.25 foot minimum, 3 foot maximum	2 foot minimum, 3 foot maximum
Q <sub>5</sub> discharge	132 cfs	132 cfs
Earthwork Haul Off	Yes	No; may be able to use channel spoils to increase capacity of channel
Utility Conflicts	Significant; Water, Gas, Dry Utilities, will likely have to relocate ~2,000 LF of water line	Minimal; Can likely avoid all utilities
Historic Flow Path	No; follows the new flow pattern that developed as a result of the fire and flooding	Yes; closely follows the historic flow pattern
Appearance	Large roadside channel with large culverts crossings	More natural channel with limited roadway crossings
EWP Funding	Yes but will not fund driveway and road crossings, significant additional funding needed	Yes but will not fund driveway and road crossings
Construction Cost	~\$840,000	~\$385,000
Within Benefit/Cost Analysis	No	Yes